Contributions to the Flora of Long Island, New York Sixth Paper*

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All the plants listed in this paper, at every locality cited, were collected by the writer, mostly in the seasons of 1928-29. There are a few exceptions to this of plants not before recorded in these papers, and also some new localities for rare plants listed in former papers. These records are restricted to plants that in the writer's experience are rare on Long Island. Duplicates of most have been deposited in public herbaria.

Sparganium and Lemna were named by Dr. P. A. Rydberg.

Cuscuta by Dr. T. G. Yuncker.

Gramineae by Mrs. Agnes Chase.

Carex by Mr. K. K. Mackenzie.

Juncus Dudleyi, secundus, debilis by Mr. F. V. Coville.

Eleocharis palustris group by Dr. M. L. Fernald, who has just published a revision of this group in Rhodora, April, 1929.

All doubtful plants by the staff of the New York Botanical Garden. The writer gratefully acknowledges his appreciation of this generous aid.

SPARGANIACEAE

Sparganium Eurycarpum Englm. Rare in swamps, South Jamaica.

Sparganium acaule (Beeby) Rydbg. Rare in wet borders of streams. Freeport, Merrick, Seaford, Massapequa, Amityville, Babylon.

Sparganium diversifolium Graeb. Rare in wet borders of streams and swamps. Baldwin, Seaford, Amityville.

GRAMINEAE

PASPALUM CIRCULARE Nash. Rare in meadows. Oakdale.

Panicum Lucidum Ashe. Rare or occasional in sphagnum bogs and swamps. Meadowbrook, Ronkonkoma, Freeport, Seaford, Laurelton, Bellmore, Brookhaven, Cold Spring Harbor, Babylon, Massapequa.

ZIZANIA PALUSTRIS L. In water. Rare and local; very large colonies at Sayville and Brookhaven. Small colonies at Flushing, South Jamaica, Bayport.

STIPA AVENACEA L. Rare or occasional in dry woods. Easthampton, North Sea, Hither Woods, Montauk, Sag Harbor, Oakdale, Wyandanch.

MUHLENBERGIA FOLIOSA Trin. Rare in damp meadows. Fresh Meadow Road, Flushing.

* Previous papers in this series appeared in Torreya 22: 43–49, 1922. Bull. Torey Club 51: 177–201, 1924; 52: 133–136, 1925; 53: 303–308, 1926. Torreya 28: 45–51, 1928.

Brachyelytrum erectum (Schreb.) Beauv. Occasional in rich hilly woods in and north of the morains, locally abundant. Queens, Port Washington, Smithtown, Millneck, Glen Cove, Plattsdale. Very rare south of the morain at Oakdale.

Trisetum pennsylvanicum (L.) Beauv. Rare in swamps and wet thickets. Yaphank, Cold Spring Harbor, Oakdale, Sagville.

, Uniola laxa (L.) B.S.P. Rare in moist, rich woods. Merrick.

PANICULARIA GRANDIS (S. Wats.) Nash. Rare in swamps. Newtown.

Panicularia nervata (Willd.) Kuntze. var. stricta Scribn. Rare in rich soil and drier parts of swamps in North western Long Island. Winfield, Newtown, Woodside. Grows in drier situations, culms more scattered, not densely tufted like the species. Is much lower and slenderer, with narrower leaves, the dark brown spikelets having longer scales and maturing two or three weeks earlier. The writer believes this plant will eventually be given specific rank.

CYPERACEAE

Cyperus flavescens L. Rare, wet sandy shores and swamps. Sayville, Oakdale, Wantagh, Valley Stream, Cold Spring Harbor.

CYPERUS ENGELMANNI Steud. Rare on wet shores. Baisley Pond, Jamaica.

CYPERUS SPECIOSUS Vahl. Frequent throughout in wet fresh, brackish and salt shores and swamps. Reported in my former papers as *Cyperus ferax* Richard. Dr. N. C. Britton now names our common Long Island plant — speciosus—and states that ferax is southern, reported as far north as New Jersey and possible on Long Island.

ELEOCHARIS PALUSTRIS! (L.) R. & S. var. major Sonder. Rare. Often in water, Wading River. Seaford.

ELEOCHARIS SMALLII¹ Britton. Frequent in swamps and wet shores. Winfield, Cold Spring Harbor, Massapequa, Millneck, Ronkonkoma, Sag Harbor, Meadowbrook, Bridgehampton, Flushing, Amityville.

ELEOCHARIS CALVA¹ Torr. Rare in swamps. Cutchogue, Woodside, Massapequa.

ELEOCHARIS UNIGLUMIS¹ (Link). Schultes var. halophila Fernald & Bracket, Rare, salt and brackish shores and marshes. Easthampton. Montauk.

Scirpus Microcarpus Presl. Rare in swamps. Flushing, Woodside.

Scirpus Paludosus Nelson. Frequent throughout in salt marshes. The validity of this species as distinct from *Scirpus robustus* Pursh is established beyond doubt. The writer's suggestion that it might prove to be a seedling of *robustus* is not worth consideration. (Bull. Torrey Club 1925.)

RYNCHOSPORA TORREYANA A. Gray. Very rare in damp soil. Amityville.

SCLERIA TRIGLOMERATA Michx. Rare in moist soil. Oakdale, Amityville, Seaford.

SCLERIA MINOR (Britton) Stone. Very rare in most meadows. Oakdale, Babylon.

¹ Eleocharis palustris in North America. M. L. Fernald, Rhodora, April 1929.

- Scleria Pauciflora Muhl. Rare in dry or moist soil. Pine barrens at Oakdale and Ronkonkoma. Hempstead Plains at Garden City. Mineola, Westbury, and Hicksville.
- CAREX LEPTALEA Wahl. Occasional in wet sphagnum thickets, Millstone, Flanders, Central Islip, Montauk, Lakeview, Wyandanch, Cold Spring Harbor, Roosevelt, Smithtown, Oakdale, Bayport.
- Carex Richii² (Fernald) Mackenzie. Rare in swamps. Fresh Meadow Road. Flushing.
- CAREX BUXBAUMII Wahl. Very rare. Wet place in hilly rich woods. Queens. CAREX BARRATTII (Schw.) Torr. Rare in swamps. Islip, Wyandanch, Lynbrook, Oakdale.
- CAREX POLYMORPHA Muhl. Rare in damp soil. Oakdale.
- CAREX TETANICA Schkr. Rare in damp meadows. Newtown, Winfield.
- CAREX TRISPERMA Dewey. Rare in sphagnum in wet bogs and woods. Oakdale, abundant; the only station the writer has seen the typical species.
- CAREX TRISPERMA Dewey var. Billingsii Knight. Rare in wet sphagnum. Speonk, Flanders, Babylon, Lindenhurst.
- CAREX LACUSTRIS Willd. Very rare in swamps. Winfield.
- CAREX PRAIREA Dewey. Very rare in swamps. Winfield.
- CAREX HYSTRICINA Muhl. Rare in swamps. Newtown, Winfield, Locust-Valley, Oakdale.

LEMNACEAE

- LEMNA TRISULCA L. Rare in streams. Oakdale.
- LEMNA CYCLOSTASA (Ell.) Chev. Rare in streams and ponds. Oakdale, Queens.
- Lemna Perpusilla Torr. Rare in streams, ponds, and ditches. Queens, Newtown, Oakdale, Babylon.
- LEMNA MINOR L. Frequent throughout in ponds, streams and ditches.
- SPIRODELLA POLYRHIZA (L.) Schult. Frequent throughout in ponds, streams and ditches.

JUNCACEAE

- JUNCUS DUDLEYI Wiegand. Very rare in damp meadows. Winfield.
- JUNCUS SECUNDUS Beauv. Very rare in dry soil. Flushing, Wyandanch.
- JUNCUS DEBILIS Gray. Very rare in wet-sand. Amityville.
- JUNCUS SUBCAUDATUS Coville and Blake. Rare in swamps and wet shores. Wantagh, Merrick.
- JUNCUS GERARDII Lois. Very common in salt and brackish marshes. Rare in fresh water swamps. Winfield. Fresh Pond. West Forest Hills, Middle Valley. The foregoing are in my herbarium and in addition I have recorded it at Woodside, and Newtown.

MELANTHACEAE

OCEANORUS LEIMANTHOIDES (A. Gray) Small. Rare in pine barren wet thickets. Babylon.

LILIACEAE

- LILIUM CANADENSE L. Rare in moist meadows and rich woods. Montauk, Flushing, Queens.
 - ² Bull. Torrey Club. Vol. 49 No. 12 December 1922, Mackenzie.

ERYTHRONIUM AMERICANUM Ker. Locally abundant in wet woods. Plattsdale, Woodside, Flushing, Bayside, North Beach, Millneck, Newtown, Glencove.

HAEMODORACEAE

Gyrotheca tinctoria (Walt.) Salisb. Rare. Damp meadow. Oakdale.

ORCHIDACEAE

IBIDIUM PLANTAGINEUM (Raf.) House. Very rare in damp meadows. Winfield.

FAGACEAE

QUERCUS VELUTINA Lam X MARYLANDICA Muench. Rare in dry soil. Central Park. Determined by Wm. Trelease.

POLYGONACEAE

Persicaria fluitans (Eaton) Greene. Rare in swamps north of Moraine. (Polygonum Hartwrightii Gray.) Winfield.

CABOMBACEAE

Cabomba caroliniana A. Gray. Rare in ponds in hilly rich woods. Queens, two widely separated small ponds.

RANUNCULACEAE

Batrachium trichophyllum (Chaix.) F. Schultz. Rare in streams. Valley Stream, Massapequa, Lindenhurst, Oakdale, Islip.

CRUCIFERAE

ARABIS GLABRA Bernh. Rare along roadsides. Massapequa.

Cardamine parviflora L. Rare in rich damp woods and on sandy wet shores. Richmond Hill, Queens, South Jamaica, Roslyn, Glen Cove, Wading River.

ROSACEAE

RUBUS ODORATUS L. Rare, roadsides and hilly woods. Cold Spring Harbor

CALLITRICHACEAE

- Callitriche Palustris L. Occasional in ponds and streams. Cold Spring Harbor, Rosedale, Great River, Bayside, Valley Stream, Flushing, Islip, Massapequa.
- Callitriche Heterophylla Pursh. Occasional or frequent in ponds and streams. Massapequa, Freeport, Valley Stream, Montauk, Mill Neck, Seaford, Wantagh. I have also identified both species at several other localities

HYPERICACEAE

- ASCYRUM HYPERICOIDES L. Rare. Damp meadow. Merrick. Hilly rich woods Wyandanch.
- HYPERICUM DISSIMULATUM Bicknell. Rare in swamps and on wet shores. Bridgehampton, Wantagh.

VIOLACEAE

VIOLA ERIOCARPA Schwein. Rare in rich hilly woods. Woodside, Locust Valley.

LYTHRACEAE

ROTALA RAMOISIOR (L.) Kuhn. Rare in swamps and on wet shores. Cypress Hills, Lynbrook, Queens, Kew Gardens.

ARALIACEAE

Panax Trifolium L. Rare in wet woods. Cold Spring Harbor, Millneck, North Beach, Glen Cove, Bayside.

AMMIACEAE

WASHINGTONIA CLAYTONI (Michx.) Britton.

Washingtonia longistylis (Torrey) Britton. Both species are frequent or common, in rich woods on and north of the moraine. The former less frequent and averaging smaller than the latter. Very rare south of the moraine. Both species growing together south of Baisley Pond, South Jamaica.

PYROLACEAE

Pyrola chlorantha Sweet. Rare in dry pine woods. Oakdale, (2 colonies), Sayville, Ronkonkoma.

PRIMULACEAE

NAUMBERGIA THYRSIFLORA (L.) Duly. Very rare in swamps. Newtown.

GENTIANACEAE

Dasystephana Andrewsii (Griseb.) Small. Very rare. Swamp north of moraine. Winfield.

ASCLEPIADACEAE

ASCLEPIAS RUBRA L. Rare in moist soil. Babylon.

CUSCUTACEAE

Including all reported in former papers. The two common species on Long Island are,

Cuscuta compacta Juss and custuca gronovii Willd., both varieties. The others are rare.

Cuscuta Pentagona Englm. Rare in dry or wet places. Lynbrook, Newtown (Cuscuta arvensis Beyrich.)

CUSCUTA POLYGONORUM Englm. Rare in open swamps and wet woods and thickets. Queens, Plattsdale (Three widely separated colonies.)

Cuscuta Coryli Englm. Rare in wet thickets and swamps. Middle Island, Sag Harbor, Easthampton, Coram, Sea Cliff, East Islip, Oakdale.

Cuscuta Gronovii Willd. var. vulgivaga Englm. Frequent, mostly in wet places. North Branch, Westhampton, Bellmore, South Jamaica, Merrick, Millneck, Massapequa, Hempstead, Cold Spring Harbor, Valley Stream, Queens, Easthampton, Glen Cove, East Islip, Plattsdale, Wantagh.

Cuscuta Gronovii Willd. var. latiflora Englm. Frequent, mostly in wet places. Bayside, Oyster Bay, South Jamaica, Babylon, Southold, Flushing Montauk, Water Mill, Mill Neck, Roosevelt, Valley Stream, Sag Harbor, Woodside, Oakdale, Amityville, Wantagh.

Cuscuta compacta Juss. Frequent in wet places. Wantagh, Laurelton, Speonk, Babylon, Lindenhurst, Massapequa, Mill Neck, Merrick, Roslyn Flushing, Smithtown, Wyandanch, Central Islip, Roosevelt, Valley Stream, Queens, Sag Harbor, Easthampton.

The writer has seen and recorded the three last in many other localities.

LABIATAE

KOELLIA INCANA (Michx.) Kuntze. Rare in dry soil. Southold, Baldwin.

SCROPHULARIACEAE

SCROPHULARIA MARYLANDICA L. Rare in hilly rich woods. Bayside.

LENTIBULARIACEAE

Stomoisia juncea (Vahl.) Barnhart. Rare in swamps and sandy shores. Flanders, North Bellmore.

STOMOISIA VIRGATULA Barnhart. Very rare on wet sandy shores. Oakdale.

RUBIACEAE

Galium Vaillantii D. C. Rare in field and thickets. Massapequa.

CAPRIFOLIACEAE

TRIOSTEUM ANGUSTIFOLIUM L. Rare in hilly rich woods of moraine. Glenhead.

COMPOSITAE

SOLIDAGO FLEXICAULIS L. Very rare in hilly rich woods of moraine. Glen Head.

LEPTILON PUSILLUM (Nutt.) Britton. Rare in dry or moist sandy soil. Ronkonkoma, Central Islip, Coram, Oakdale, all four stations in pine barrens. Point of Woods, growing extensively back of sea beach.

HELIOPSIS SCABRA Dunal. Rare in dry woods or their borders. Babylon.

Senecio aureus L. Rare in wet meadows, swamps and wet woods. Bayside, Mill Neck, Winfield, Newtown, Flushing, Smithtown.

Senecio gracillis Pursh. Very rare in damp meadow, Oakdale. Determined by J. K. Small.

HEMPSTEAD, N. Y.